

**Amendments to the Specification:**

Kindly amend paragraph 26 of the specification as follows:

[26] Tracking module 10 provides position information when the heads of persons seated in front of a video conferencing camera moves. Modeling module 12 creates a three-dimensional model of the head of person seated in front of the camera so as to form an ellipsoid model. Dynamic lighting module 14 receives position information and moves the lighting to correspond to the movement of the head being tracked. Video rendering module ~~[[14]]~~ 16 displays the processed video data from the mixer module 8. It should be understood that the processed video data can be also transmitted to a destination video conferencing device (see FIG. 12).

Kindly amend paragraph 40 of the specification as follows:

[40] Advantageously, by placing directional light sources, such as direct and indirect point lights, ~~is it~~ it is possible to generate complex illumination effects on the 2D plane on which the image lies and selectively improve the perceived quality of the image or video sequence of images. It should be appreciated that the term  $Ka$  of Equation 3 represents the contribution to the image brightness. It is possible to estimate  $Ka$  from the evaluation of the input picture brightness.  $Ka$  can compensate if the input picture has a low brightness value. For every point light placed in the scene the corresponding  $Ks$  controls the brightness of the specular highlight. Together with the associated specular coefficient and the light direction can be used to highlight the region of interest of a video (for example, as shown in FIGS. 6B-6F below). The term  $Kd$  accounts for the diffuse reflection of the surface and has a more general use.

Kindly amend paragraph 41 of the specification as follows:

[41] Purely by way of example without limitation of the invention, image processing results based on the museum model and an original image are illustrated in FIGS. 6A-6F. Accordingly, FIG. 6A represents an original image unprocessed image. Note that the image

of the face of the subject is generally underexposed. FIG. 6B illustrates a single point light applied to the image with parameters, such as  $k_a = 0.1$ ,  $k_d = 0.1$ ,  $k_s = 0.2$ ,  $n = 20$ . FIG. 6C shows the results of using two point lights with parameters, such as  $k_a = 0.2$ ,  $k_{d1} = k_{d2} = 0.1$ ,  $k_{s1} = k_{s2} = 0.2$ ,  $n_1 = n_2 = 2$ . FIG. 6D illustrates the results after ~~there~~ three point lights are located at the top of the head and two sides. In addition, a point light is included that instead of being summed to the image brightness is subtracted. The subtraction from the image brightness is a way to generate shadows. FIG. 6F also has the same three point lights, as in FIG. 6D. Finally for comparison purposes, FIG. 6E represents the original image after processing of brightness and contrast but no addition of virtual lighting as in FIGS. 6B-6D.

Kindly amend paragraph 51 of the specification as follows:

[51] Referring to FIG. 12, user interface 202 is a component of video conferencing system 200, which sends out-bound video signals and receives in-bound video signals relating to the user of the system. User interface 202 is operatively connected to the control circuitry 204 and includes at least a video camera 210, and a display device 212. Display device 212 provides visual signals to the user in the form of alphanumeric characters, colors, graphics, and video movements. Display device 212 may be a known display device, such as a liquid crystal display, or computer monitor. The display surface of the device 212 may include one or more video windows for viewing the other party to the video conference. Video camera 210 may be any number of suitable video cameras for digital use, such as commercially available web-cameras. If desired, a keyboard 214 may be included with user interface 202. With continued reference to FIG. 12, control circuitry 204 may include hardware and software that enables ~~to operate~~ operation across a network (not shown). The control circuitry 204 may include a microprocessor for use on digital networks. In one arrangement, the video conferencing system may operate with commercially available operating software. Control circuitry 204 also includes an operable connection to memory 206. Memory 206 stores computer readable data installed or programmed by a user, including instructions for digitally illuminating an object. Memory 206 can be any type, which provides nonvolatile storage that can be electrically erased

and/or reprogrammed.